

REMARKS

In the Office Action mailed June 1, 2004, the Examiner rejected claims 23-30, 32-34, 36-37, 40-41, 44-45, and 49-51 under 35 U.S.C. § 102(e), and claims 23-52 under 35 U.S.C. § 103(a). Applicant has amended claims 23 and 52 to clarify that the at least two insulator posts are composed of silicon dioxide and provide an interface between the substrate layer and the spring. No new matter has been added.

Claim Rejections under 35 U.S.C. § 102(e)

The Examiner rejected claims 23-30, 32-34, 36-37, 40-41, 44-45, and 49-51 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,388,299 ("Kang"). In amended claims 23 and 52, Applicant recites a method for making a contactless acceleration switch. The method includes forming at least two silicon dioxide insulator posts on a substrate layer. The method also includes forming a spring on a sacrificial layer. When the sacrificial layer is removed, the at least two insulator posts provide an interface between the substrate layer and the spring.

In contrast, Kang describes forming an etch channel composed of two different materials on the substrate layer. What the Office Action identified as insulator posts (182/184) in Kang is an etch channel. The etch channel is composed of two layers. The first layer deposited on the substrate is an oxide, while the second layer, which is deposited on the first layer, is silicon nitride. (See, e.g., Kang, column 11, lines 36-42.) The etch channel includes two layers composed of different materials so that one layer can be selectively removed. Kang describes removing the oxide layer of the etch channel to form a cavity. (See, e.g., Kang, column 12, lines 46-48.)

Because the oxide layer in the etch channel is removed to form a cavity between the silicon nitride layer and the substrate layer, the etch channel does not provide an interface between the

substrate and the spring. Accordingly, Kang does not show or suggest forming at least two silicon dioxide insulator posts on the substrate layer or that the at least two insulator posts provide an interface between the substrate layer and the spring. Thus, Kang does not show or suggest each and every element of claims 23 and 52. Therefore, Applicant submits that Kang does not anticipate claims 23 and 52.

Claims 24-30, 32-34, 36-37, 40-41, 44-45, and 49-51 depend from claim 23. Accordingly, the Applicant also submits that Kang does not anticipate claims 24-30, 32-34, 36-37, 40-41, 44-45, and 49-51.

In light of the above, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102(e).

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 23-52 under 35 U.S.C. § 103(a) as being unpatentable over Kang in view of U.S. Patent No. 5,818,093 ("Gutteridge"), U.S. Patent No. 5,808,331 ("Zhang"), and U.S. Patent No. 5,693,545 ("Chung"). As described above, Kang does not show or suggest forming at least two silicon dioxide insulator posts on the substrate layer or that the at least two insulator posts provide an interface between the substrate layer and the spring. Gutteridge, Zhang, and Chung, each and in combination, fail to overcome these deficiencies in Kang.

The Office Action stated that Gutteridge discloses forming at least two thermal grown oxide insulator posts 21 on the substrate layer 14. (See Office Action, page 4.) However, the field dielectric layer 21 is not used to provide an interface between the substrate 14 and the beam 10. An anchor block 12 provides an interface between the beam 10 and a polysilicon base 6. (See, e.g., Gutteridge, Fig. 1.) Further, Gutteridge shows the beam 10 connected at a single end to the anchor

block 12. Thus, the anchor block cannot be described as being at least two insulator posts. Accordingly, the combination of Kang and Gutteridge does not show each and every element of claims 23 and 52.

The Office Action cited to Zhang as teaching implanting the channels regions and etching the oxide and polysilicon layers. (See Office Action, page 5.) The Office Action cited to Chung as teaching thermally growing oxide posts and a sacrificial layer. (See Office Action, page 5.) However, these citations to fabrication techniques do not overcome the deficiencies in Gutteridge and Kang. Accordingly, the combination of Kang, Gutteridge, Zhang, and Chung does not show each and every element of claims 23 and 52.

Claims 24-51 depend from claim 23. Accordingly, the Applicant also submits that claims 24-51 are not obvious in light of the combination of Kang, Gutteridge, Zhang, and Chung.


In light of the above, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 103(a).

CONCLUSION

In light of the above amendments and remarks, Applicant submits that the present application is in condition for allowance and respectfully request notice to this effect. The Examiner is requested to contact Applicant's representative below if any questions arise or he may be of assistance to the Examiner.

Respectfully submitted,

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